

# MasterFlame<sup>®</sup> MO 700

## Firestop mortar

### DESCRIPTION

**MasterFlame MO 700** is a gypsum based mortar, used to reinstate the fire resistance performance of floor constructions where they have been provided with openings for the penetrations of multiple services.

**MasterFlame MO 700** is supplied as a dry powder material, and is mixed with water to the required consistency prior to installation.

### TYPICAL APPLICATIONS

**MasterFlame MO 700** is intended for sealing around all types of M&E service penetrations through floors and walls, where a rigid seal is required. The unique **MasterFlame MO 700** enables even the most demanding applications to be covered.

### ADVANTAGES

- Fire Integrity up to 4 hours
- Rapid setting, zero shrinkage formulation
- Can be used as pourable or trowel grade, gas tight seals
- Excellent workability ranging from stiff to pourable mix
- Good load bearing performance in floor apertures. (Consult Master Builders Solutions Technical Team for details)
- Contains no asbestos

### PACKAGING AND COLORS

**MasterFlame MO 700** is supplied in 20kg bags and available in Off White.

### STANDARDS

EN 13501-2  
 EN 1366-3  
 ETAG-026



### TYPICAL PROPERTIES\*

Density	850-950 kg/m <sup>3</sup>
Load bearing	2.5 kN/m <sup>2</sup> UDL
Fire resistance	Upto 4 hours
Acoustic performance R'w (C; Ctr) (dB)	47dB reduction at 100mm
Max unsupported span	700mm (Consult Master Builders Solutions for larger spans)
Thermal conductivity (U Value) @100mm	0.21 - U Value I / 'R' 2.1
Thermal resistance 'R' (t/k) @100mm	0.48
Expansion on Setting	0.1%

### APPLICATION GUIDELINES

#### MIXING

**MasterFlame MO 700** should be mixed by mechanical paddle. Measure out the correct amount of potable quality water into a clean container to achieve the desired consistency.

**MasterFlame MO 700:** water ratio:

Flooring openings - Pourable mix ratio of 2.5 : 1  
 Small wall openings - Trowelable mix ratio of 3 : 1

Gradually add the **MasterFlame MO 700** stirring continually. Continue mixing until the **MasterFlame MO 700** is mixed to a smooth even consistency. Any spillage should be wiped up with a damp cloth before setting occurs or it may stain pipes and services. Mix only enough material sufficient for use within the recommended pot life (20-30 minutes). Pot life and set times will be reduced for lower water content and higher temperatures.

**MasterFlame MO 700** when cured is self-supporting in a floor to spans of 700mm. Temporary shuttering is required to support the wet weight of the **MasterFlame MO 700**. The seal is non-combustible and is load bearing.

Installation should not be carried out when temperatures are above 40°C. Setting times are normally between 30 and 90 minutes.

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**Warning:** Do not attempt to extend working time by remixing with additional water once the mortar has started to set, as this will interfere with the setting process. Always mix in clean buckets. Using dirty buckets containing remains of compound from earlier mixes may reduce working time.

## SETTING AND HARDENING

Unlike cement-based fire stopping mortars, **MasterFlame** gypsum based compound achieves maximum wet strength in only 4 hours after casting.

Ultimate strength is reached when fully hardened. The drying time will be dependent on the prevailing ambient conditions.

Extra installation details and technical support are available from Master Builders Solutions technical services department. Please contact Master Builders Solutions for Loadbearing calculations at all times.

## INSTALLATION

### Wall Openings

For small holes and gaps, trowel a stiff mix into the opening to the correct depth. For larger holes, use an appropriate damming material to support the mix until it sets, or, if a fair faced finish is required to both sides, consider using a sandwich construction. Alternatively, the

**MasterFlame MO 700** may be pre-cast into convenient sized blocks, a stiff mix being used as a bedding mortar. All combustible services (plastic pipes etc.) should have a tested fire rated closure device/material fitted prior to the pouring of the **MasterFlame MO 700**. These are typically Master Builders Solutions intumescent pipe wraps.

### Floor Openings

When sealing holes in floor slabs, appropriate shuttering must be installed, cut to fit tightly around any services within the opening, to support the wet mix until it sets. Non-combustible shuttering materials, such as mineral fibre slab, can be left in place, but combustible materials must be removed, after the mix has set. For complex penetrations it may be preferable, to initially form a thin seal around all services, with a nominal 5-10mm layer of the

**MasterFlame MO 700** mix. Once this has set, the remaining depth of seal should be poured in one operation upto the allowed maximum 100mm.

All combustible services (plastic pipes etc.) should have a tested fire rated closure device/material fitted prior to the pouring of the **MasterFlame MO 700**.

For full installation details and technical support please contact Master Builders Solutions Technical Services department or refer to our method statement.

## COVERAGE / YIELD

80kg/m<sup>2</sup> @ 100mm thickness, though service sizes, mixing ratios could possibly effect yield i.e. 4 bags / m<sup>2</sup> @ 100mm thick mortar.

## STORAGE AND SHELF LIFE

**MasterFlame MO 700** has a shelf life of 12 months from production date when stored indoors, ideally in dry frost free conditions, between +5°C and +30°C.

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## QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

\* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.

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### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

### NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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